

**Addendum 2****PROGRAM REPORTS****SITE ASSESSMENT AND CLEANUP PROGRAM****Program Overview/Regulatory Framework**

The Regional Board's legal authority for regulation of site cleanup is found in Division 7 of the California Water Code, State Board plans and policies (specifically Policies 92-49 and 68-16), and the Region's water quality control plans (Basin Plans). Basin Plans complement and implement the California Water Code and State Board policies, and provide the foundation for the Regional Board's site cleanup regulatory program. These plans designate the beneficial uses of surface and ground water, setting the narrative and numerical water quality objectives to protect those beneficial uses, and establishing implementation plans to achieve the standards established by the plan. The specific section in the Basin Plan that applies to this program is the site cleanup implementation plan. The Regional Boards must ensure that dischargers are required to clean up soil and groundwater to levels that achieve background water quality, or, if background is not reasonable, an alternative level may be set that is the most stringent level that is economically and technologically feasible and at least complies with Title 23 California Code of Regulations (CCR) section 2550.4, protects beneficial uses of water and achieves Basin Plan standards. Section 2550.4 requires consideration of, among other things, public health risks, and damage to wildlife and crops from exposure to waste. A health or ecological risk assessment may be necessary to comply with Resolution 92-49 and to meet the requirements of Title 23 CCR section 2550.4.

There are two primary program elements in the Site Cleanup Program: Spills, Leaks, Investigation, and Cleanups (SLIC) and the Federal Facilities Program (DoD/DoE).

**Spills, Leaks, Investigation, and Cleanups (SLIC) Program**

In the Spills, Leaks, Investigations & Cleanup (SLIC) Program, Regional Board staff oversee the investigation and cleanup of sites with soil and groundwater pollution by numerous pollutants, including petroleum, volatile organic compounds, pesticides, and inorganic constituents, among others. Although the primary focus of the program is restoration of groundwater quality, the Program deals with all environments, including surface water, groundwater, soil, sediment, the vadose zone and air, where vapor releases may affect public health. Upon confirming that an unauthorized discharge has polluted, is polluting or threatens to pollute water quality, the Regional Board initiates, pending available resources, oversight of site investigation and cleanup. Generally dischargers perform cleanup on a voluntary basis. Sites include industrial facilities, dry cleaners, pipeline leaks and spills, aboveground tank farms, and pesticide and fertilizer facilities, among others. Much of the pollution is due to past waste disposal and handling practices, as well as spills and leaks. Many of these sites have polluted or threaten nearby municipal or private water supply wells. New sites are discovered as a result of recent spills, property transactions, or nearby environmental investigations, especially UST investigations. Cleanup of Brownfields has become a new focus of the Site Cleanup Program, to provide oversight of cleanup of polluted properties in mainly blighted, urban areas.

The Water Code allows the Regional Board to recover reasonable expenses from responsible parties to oversee investigation and cleanup activities. The responsible parties must sign an acknowledgement form stating the intent to pay oversight bills, and a unique account is set up for staff charges. Invoices are generated quarterly. Since its inception 10 years ago, the program has a 98% recovery rate. In cases where a Cleanup and Abatement Order is issued, that Order provides the basis for reimbursement of oversight cost. The SLIC Program also receives some limited funding for site cleanup oversight from the Cleanup and Abatement Account. Funds available in that account are the result of staff cost recovery from ACLs and settlements the Regional Board has collected. A relatively small portion of the total funding source is the general fund.

**Federal Facilities Program**

The Federal Facilities Program is similar to the SLIC program in pollutants and environments addressed, but is restricted to federally owned or previously owned Department of Defense (DoD) and Department of Energy (DoE) sites. Decades of

defense and energy research activities have contaminated soils and degraded water quality on and around federally-owned facilities. Many of these facilities are federal Superfund sites and require large, complex investigation and cleanup work over multiple years involving close cooperation with other State and federal agencies including the Department of Toxic Substances Control and the US EPA. Agreements with the DoD provide for accelerated cleanups at military bases and other Defense sites scheduled for closure and reuse, and also provide cost-recovery funding for State oversight activities. Site investigation and cleanup procedures are consistent with State laws and regulations as well as applicable provisions of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or federal superfund law. The most recent round of base closures had a minor impact on this region and only resulted in the closure of Riverbank Army Ammunitions Plant.

### **Central Valley Region's Site Cleanup Program**

Staff is actively working on approximately 350 SLIC facilities, encompassing approximately 740 cleanup sites, under cost recovery within the Region. Staff work on another 30-40 facilities that are not yet in cost recovery using Cleanup and Abatement Account funds or general funds. For the purposes of this discussion, Aerojet, a large complex rocket manufacturing facility that includes approximately 350 individual sites, is included in the SLIC program. In the Federal Facilities Program, staff is working on approximately 20 major DoD facilities, encompassing approximately 600 sites and 265 UST cases, and 2 major DoE facilities encompassing 15 individual cleanup sites. The federal facilities are typically very large and complex. Regional Board staff also actively work on other non-cleanup program issues at these cleanup facilities, such as NPDES permits, WDRs for stormwater, Title 27 landfills, and waste discharge to land.

The primary workload for the Region's staff is managing/directing the investigation and cleanup of soil and groundwater at these facilities, while also addressing human health issues where necessary, such as vapor releases. The number of DoD and DoE facilities and associated sites is not expected to increase in the coming years as these are fairly mature programs. As No Further Action is required at sites at these facilities, the total number of sites worked on at federal facilities is expected to decrease over time. Funding for DoD programs on the State level is annually based on the anticipated needs of the individual Regions, with each Region receiving funding to cover the anticipated costs of oversight at each specific facility based on each year's estimate of work proposed by the DoD facility. As such, for the most part funding has been and remains generally stable to meet staffing oversight needs in the Federal Facility program. However, in some instances the military bases ask the Region to do more oversight work than the funding level allows, particularly at closed bases that are very intent on transferring property for redevelopment.

The Regional Board SLIC Cost Recovery Program, on the other hand has been chronically under-funded. The net number of new SLIC sites being worked on increases by approximately 20 each year, while funding for the program has remained relatively stable. The Region has recently received 3 additional positions for oversight of cleanup work at redevelopment and Brownfield sites. There are currently 533 sites on the SLIC backlog list where no staff resources are available.

**Public Outreach.** In response to requests from the public and CalEPA, the Regional Boards are currently in the process of improving its public participation efforts. To that extent, all cleanup staff recently attended a public participation training class developed by the California Water Boards Training Academy. This class was specifically designed for Regional and State Board staff on how to improve stakeholder involvement in our decision-making processes.

As part of the renewed effort on public participation improvement the Regional Boards and the State Board have jointly prepared a guide titled "Public Participation at Cleanup Sites" manual for use by staff. The purpose of this document is to specifically assist cleanup program staff in providing appropriate opportunities for public participation in the site cleanup program.

**Geotracker** is a geographic information system (GIS) that provides online access to environmental data to both regulators and the public. Region 5 staff is in the process of entering data for all Regional Board lead cleanup sites. Eventually, the public will be able to access extensive site information on the current status of cleanups that the Regional Board is overseeing.

Region 5 also maintains extensive case files on all of our cleanup sites, both open (actively worked on) and closed (No Further Action letter has been issued), available for public review. Current real-estate practice calls for a case file review whenever a cleanup site property, or nearby properties, are bought/sold to determine if contamination still exists. Typically, the Sacramento Office alone receives 4 to 5 requests a week to review site files.

### **Challenges**

- Staff resources are well below the need to start addressing the backlog or to effectively work on the new Brownfields sites. Although we have received an additional 3 positions to work on site cleanup, short-term challenges include not being able to currently hire, and once we can, to find and train qualified staff to work on these sites. Especially considering the emphasis on expedient oversight on Brownfield site cleanups, the demands on the limited staff keep increasing.

- The Governor has placed a renewed emphasis on investigating and cleaning up brownfield sites to restore those sites to beneficial economic reuse. Recent legislation has also furthered the emphasis on brownfield cleanup and reuse. Many of our SLIC sites, and some of our closing military bases are brownfield sites. As part of the Governor's brownfield initiative the Regional and State Board and the Department of Toxic Substances Control were asked to improve coordination on these sites to more efficiently address the cleanup issues. This renewed emphasis has placed additional workload demands on staff to address some of these issues. Recently an MOA was signed between the Regional Boards, State Board and DTSC to improve coordination between DTSC, SWRCB, and RWQCB and their oversight of cleanup activities at brownfield sites and to determine quickly which agency should become the lead state oversight agency. The MOA is designed to accomplish the following objectives:
  1. It limits oversight to only one agency
  2. It establishes procedures and guidelines for identifying the lead agency
  3. It calls for a single, uniform site assessment procedure to be used by both agencies
  4. It requires all cleanups to address the requirements of both agencies
  5. It defines the roles of support agencies, and procedures for transferring sites to the other agency when appropriate
  6. It requires both agencies to provide ample opportunity for public involvement in their cleanup decisions
  7. It commits both agencies to timeframes for review of documents
  8. It commits both agencies to coordination and communication on brownfield sites.

The most significant changes that the MOA represents are that new sites are assigned a lead agency, that at each site both agency's requirements will have to be met, although no formal certification is provided, and that efficient coordination occurs between the agencies. The Regional Board will have to address human health impacts through risk assessments and DTSC will have to address water quality impacts.

- At some federal facilities there is a continuing resistance to the Regional Board's basic authority to regulate water quality. The DoD, DoE, and US EPA generally refuse to accept the Regional Board's fundamental regulatory authority for soil and water cleanup. Even after 15 years in the program, DoD and DoE are still refusing to accept the Regional Board's authority over soil cleanup when soil contaminants continue to pose a threat to water quality. In addition, soil and groundwater cleanup levels required by State regulations to protect beneficial uses of the water are often more stringent than cleanup levels demanded by the US EPA under federal regulations. Oftentimes the federal agencies, including DoE, DoD and US EPA do not recognize the Regional Board's authority to require these more stringent standards. This makes it difficult and contentious at times to compel the federal agencies to cleanup soil and groundwater to the same degree as private facilities are required to do.
- Beginning in 2005, new regulations adopted by the State Board require electronic reporting of monitoring data and technical reports, starting 1 July 2005 in place of the standard paper reports. For some information (e.g. data tables) this is an efficient method for the transfer and storage of data and is intended to make information more available to the public. However, for the review of large text documents, maps, and tabulated data, the system is likely to reduce efficiency while increasing the amount of time staff must spend on computer workstations. In addition hardware and software is not available to cleanup staff to fully implement the electronic reviews. Paper reports will be required until adequate support is in place to perform reviews of electronic documents
- Identifying responsible parties (RPs) for discharges of tetrachloroethylene (PCE) from drycleaning operations to soils and groundwater presents a challenge for Board staff. RP identification is necessary order to take appropriate formal and informal actions to address investigations and cleanups. These businesses generally must rely on insurance companies to provide financing to defend against litigation as the only source of funding for groundwater investigations and cleanups. In these cases even though the Board is not a party, litigation and settlements can be quite resource intensive.

In many cases PCE pollution in groundwater is first identified by detections in municipal wells or investigations conducted as a result of leaky underground storage tanks. In these cases, unless sufficient information is provided to Board staff regarding potential sources for the PCE pollution, staff resources limit the ability of staff to identify former or active dry cleaners, operators, and property owners in the area.

The environmental impacts from PCE are far worse then MTBE impacts caused from USTs sites because the PCE is very persistent, more wide spread, has caused more municipal wells to be turned off, presents higher health risks, may cause health risks due to indoor air impacts and there are little to no funds for investigation and remediation. A potential solution for this could be creation of a fund similar to the UST Cleanup Fund.